

DOCKET NO.: RTS-0256

Date of Deposit: 11/27/2001

#3/I.D.S.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: C. Frank Bennett et al.

Serial No.: Not yet assigned      Group No.: Not yet assigned

Filed: herewith

For: **Antisense Modulation of Ship-1 Expression**

31000 U.S. PTO  
10/003919  
12/06/01

BOX SEQUENCE

Assistant Commissioner for Patents  
Washington DC 20231

INFORMATION DISCLOSURE STATEMENT


Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above identified application, no additional fee is required.

Copies of each of the references listed on the attached Form PTO-1449 are enclosed.

Date: November 27, 2001

Respectfully submitted,

  
Donna T. Ward  
Registration No. 48,271

ISIS PHARMACEUTICALS, INC.  
Carlsbad Research Center  
2292 Faraday Avenue  
Carlsbad, CA 92008

32000 U.S. PTO  
10/003919  
12/06/01

Form PTO-1449 Modified	Docket No. RTS-0256	Serial No.
List of Patents and Publications Cited by Application (Use several sheets if necessary)	Applicant C. Frank Bennett et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date	Group

**U.S. PATENT DOCUMENTS**

Examiner's Initial		Document No.	Date	Name	Class	Subclass
	AA	6,238,903	5/29/2001	Krystal	435	196
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
	AL					
	AM					
	AN					

**FOREIGN PATENT DOCUMENTS**

Examiner's Initial		Document No.	Date	Country	Translation YES NO
	AO	WO 97/10252	03/20/1997	PCT	X
	AP				
	AQ				
	AR				
	AS				
	AT				
	AU				
	AV				
	AW				
	AX				

EXAMINER	DATE CONSIDERED
----------	-----------------

DOCKET NO.: RTS-0256

Date of Deposit:

11/27/00

Form PTO-1449 Modified		Docket No. RTS-0256	Serial No. not yet assigned
List of Patents and Publications Cited by Application (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Applicant C. Frank Bennett et al.	
		Filing Date herewith	Group
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AA	Bolland et al., SHIP modulates immune receptor responses by regulating membrane association of Btk, <i>Immunity</i> , 1998, 8:509-516	
	AB	Damen et al., Multiple forms of the SH2-containing inositol phosphatase, SHIP, are generated by C-terminal truncation, <i>Blood</i> , 1998, 92:1199-1205	
	AC	Drayer et al., Cloning and expression of a human placenta inositol 1,3,4,5- tetrakisphosphate and phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase, <i>Biochem. Biophys. Res. Commun.</i> , 1996, 225:243-249	
	AD	Geier et al., The human SHIP gene is differentially expressed in cell lineages of the bone marrow and blood, <i>Blood</i> , 1997, 89:1876-1885	
	AE	Giuriato et al., Tyrosine phosphorylation and relocation of SHIP are integrin-mediated in thrombin-stimulated human blood platelets, <i>The Journal of Biological Chemistry</i> , 1997, 272:26857-26863	
	AF	Helgason et al., Targeted disruption of SHIP leads to hemopoietic perturbations, lung pathology, and a shortened life span, <i>Genes Dev.</i> , 1998, 12:1610-1620	
	AG	Huber et al., The src homology 2-containing inositol phosphatase (SHIP) is the gatekeeper of mast cell degranulation [In Process Citation], <i>Proc. Natl. Acad. Sci. U S A</i> , 1998, 95:11330-11335	
	AH	Lamkin et al., Shc interaction with Src homology 2 domain containing inositol phosphatase (SHIP) in vivo requires the Shc-phosphotyrosine binding domain and two specific phosphotyrosines on SHIP, <i>J. Biol. Chem.</i> , 1997, 272:10396-10401	
	AI	Liu et al., The Src homology 2 (SH2) domain of SH2-containing inositol phosphatase (SHIP) is essential for tyrosine phosphorylation of SHIP, its association with Shc, and its induction of apoptosis, <i>J. Biol. Chem.</i> , 1997, 272:8983-8988	
EXAMINER		DATE CONSIDERED	

<b>Form PTO-1449 Modified</b>		Docket No. RTS-0256	Serial No. <b>not yet assigned</b>
List of Patents and Publications Cited by Application (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Applicant C. Frank Bennett et al.	
		Filing Date <b>herewith</b>	Group
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	AJ	Liu et al., Molecular cloning and chromosomal localization in human and mouse of the SH2-containing inositol phosphatase, INPP5D (SHIP). Amgen EST Program, Genomics, 1997, 39:109-112	
	AK	Okada et al., Role of the inositol phosphatase SHIP in B cell receptor-induced Ca <sup>2+</sup> oscillatory response. J. Immunol., 1998, 161:5129-5132	
	AL	Ware et al., Cloning and characterization of human SHIP, the 145-kD inositol 5- phosphatase that associates with SHC after cytokine stimulation, Blood, 1996, 88:2833-2840	
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>	